IDENTIFYING SPECIFIC EROTIC CUES IN SEXUAL DEVIATIONS BY AUDIOTAPED DESCRIPTIONS¹

GENE G. ABEL, EDWARD B. BLANCHARD, DAVID H. BARLOW, AND MATIG MAVISSAKALIAN

UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

Using audiotaped descriptions of sexual experiences and a direct measure of penile erection, it is possible to specify more precisely erotic cues in sexual deviates. Results indicated that such cues are highly idiosyncratic. Some tentative conclusions and suggested application for the method are discussed.

DESCRIPTORS: penile erection, sexual deviation, arousal patterns, auditory stimulus, strain gauge

A major stumbling block in experimental approaches to human sexual behavior has been the lack of objective, reliable measures of sexual arousal. In his review, Zuckerman (1971) concluded that an excellent measure of male sexual arousal is now available, *i.e.*, direct calibration of penile erection. Current instrumentation allows measurement of erection by either measuring penile volume changes (Freund, 1963, 1965, 1971) or penile circumference changes (Bancroft, Jones, and Pullman, 1966; Barlow, Becker, Leitenberg, and Agras, 1969) while the subject attends to different sexual stimuli.

Investigators have used these measurements for three purposes. First (e.g., Freund, 1965) to diagnose heterosexual, homosexual, and pedophiliac arousal patterns, confirming the validity and reliability of erection in diagnosis. Second, as an integral sort of treatment (e.g., Barlow and Agras, 1973), and finally, to evaluate results of experimental treatment (Abel, Levis, and Clancy, 1970; Bancroft, 1968; Barlow and Agras, 1973).

As experience with direct measurement of erections accumulates, it has become apparent that arousal patterns are considerably more idiosyncratic than traditional diagnostic categories, such as those in DSM II (American Psychiatric Association, 1968), suggest, and that erections depend heavily on the method of stimulus presentation (Abel, Barlow, Blanchard, and Mavissakalian, in press). The most frequent erotic cues employed in research on sexual arousal are visual, such as erotic slides or movies (Abel et al., in press; Bancroft, 1968; Freund, 1963, 1965, 1971). Although these cues elicit strong arousal in some subjects, many subjects report erotic cues that cannot be adequately represented visually, while others find it difficult to identify sexually arousing cues at all. The isolation of such cues, however, is necessary to construct proper assessment and treatment procedures for these subjects (Barlow, 1974).

A number of investigators (Abel et al., 1970; Marshall, 1973; Price, 1973; Rosen, 1973) have used audiotaped descriptions to generate sexual arousal. The present study demonstrated how audiotaped descriptions of erotic cues can be used to identify idiosyncratic characteristics of sexual arousal patterns in sexual deviates.

Method

The subject, seated in a comfortable reclining chair and separated from the experimenter

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by a curtain, begins by describing an erotic experience he has had or would like to have. His penile erection response, measured by a circumferential penile transducer (Bancroft *et al.*, 1966; Barlow *et al.*, 1969) is printed out on a polygraph. Descriptions 2 min in length are typically used.

The experimenter listens to the subject's verbal description and observes the concomitant changes in penile erection displayed on the polygraph record. In this way, the experimenter can determine those components of the subject's description that cause accelerating or decelerating penile responses.

After this first trial, the experimenter questions the subject about the particular content associated with increasing erection responses. The second and subsequent trials involve the experimenter describing the verbal cues that were previously erection-producing while omitting content that failed to generate erections. (We have found it advisable to make audiotape recordings of all of the experimenter's 2-min descriptions so that they are available for repeated measurement.) Through this repeated process, the experimenter is able to add or withdraw descriptive elements that have or have not produced recorded erections, and subsequently identify which complex audio cues are erection-producing for a particular subject. Specific examples of the use of this method and conclusions concerning specific erotic cues in various subjects constitute the bulk of this report.

Case A

A 23-yr-old single caucasian male was seeking treatment for an annoying fantasy. Since 8 yr of age, during masturbation, he imagined being in a room with a younger male. The unknown male in the fantasy would torture the subject by suddenly turning him into a female by using magical powers. The young male would laugh as the subject shrieked in horror as he discovered "the ultimate degradation", having his sex changed from male to female.

In fantasy, the young male would then make a sexual pass at the subject (after the latter's transformation into a woman). Ultimately, the subject felt forced to respond to this male because of the sexual responsiveness of his new female anatomy.

The subject reported a moderately active heterosexual life, having petted and had intercourse on a number of occasions. Surprisingly, during such real encounters, the subject was never bothered by his transformation fantasy, but attended exclusively to his female partner. He denied homosexual experiences and during later audiotape penile-transducer measurement he failed to respond to homosexual cues.

In spite of this rather unusual fantasy, the subject's sexual identity was male, and he denied urges to become a female as seen in the transsexual phenomenon. He had cross-dressed in women's clothes on one occasion to see if this would generate greater sexual enjoyment while fantasizing his usual transformation scene. When cross-dressing failed to generate increased sexual arousal, he discontinued it.

To help identify which cues were erotic to this subject, he was asked to describe his most erotic fantasy while his erection response was recorded (Figure 1). His subsequent audio description was as follows:

Tape 1: "Uhh... I'm standing in the presence of this person, the person I described earlier. The person very rudely, irrationally

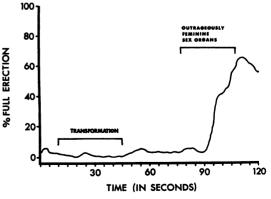


Fig. 1. Erection during Tape 1 of transformation.

does something, umm . . . signals in some way and I'm immediately transformed into a woman. The person deliberately does this because he is aware that it's degrading and he's aware the more feminine, the more outrageously feminine that I am, that he makes me, the more degraded I become. The sexual arousal also increases the more degraded I become. The features, the physical features and the sexual organs that this person endows me with, like I said, are usually outrageously feminine. He is usually . . ."

A number of conclusions can be reached by examining the subject's description and concomitant erection. First, his description is meager. Second, references to transformation or changes in the subject's body (segment 10 to 45 sec of the description) produced minimal arousal, suggesting that contrary to his report, the transformation itself might not be a significant erotic cue. Third, during the description (from 78 to 107 sec) of the subject having "outrageously feminine sex organs", there was marked sexual arousal. This suggested that a category of female sex organ should be elaborated in subsequent descriptions, since one or more elements, of this description were the stimulus for erection.

Guided by these observations, the experimenter then described a second scene (Figure 2), with the following auditory content:

Tape 2: "You see yourself with a man, a real sadistic man. He wants to really degrade you. He's looking at you and he's thinking how he can degrade you; how he can really force you to be degraded. Something overwhelmingly degrading. Now you're feeling a peculiar sensation, it will be your chest. You feel something there, it's kind of peculiar; and you start to look down and you move your hands down and you see something. You've got breasts, big, big breasts. You separate your shirt there,

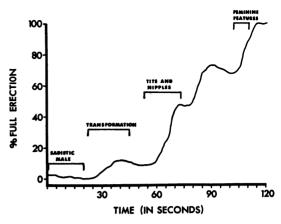


Fig. 2. Erection during Tape 2 of transformation.

and you look, and you've got tits . . . great big tits. This man has forced you to have tits. You look down; they're great big, they're big . . . and big nipples. You move your hands down, you tear your shirt off. You take your hands, and you rub your hands over your tits there, over your nipples; and he's looking at you. He's looking at you and he's watching your reaction; he really enjoys it. He sees the astonishment on your face; you're looking over at him there. He's a real sadistic guy. He really wanted to degrade you. And somehow he's brought about this change. You feel the big tits there hanging on your chest. You're tall, very tall, and you've got feminine features. He's looking at you, he's watching you; you're just, you're so degraded. You don't know how to respond and he's laughing at you. He's really enjoying it. He's really laughing at you and enjoying it a lot. He really enjoys it."

From the onset to 20 sec of this second description, the experimenter elaborated on the sadistic male who in fantasy had carried out the subject's sex change and had planned to degrade him. The minimal erection recorded both during Tape 1 and in segment 0 to 20 sec of Tape 2 confirmed that the sinister nature of the male was not erotic to the subject. From 22 through 45 sec, Tape 2 focused on the experi-

ence of being transformed from male to female; as with Tape 1, minimal arousal occurred, suggesting that references to alternation or transformation of his body could be eliminated from further descriptions because they were only minimally erotic. On the other hand, descriptions of the subject's "tits and nipples" (53 to 73 sec) led to significant sexual arousal and these cues were identified for further elaboration. The description from 102 to 111 sec also generated an accelerating erection response, as the subject was described as tall with feminine features.

By the time of the third tape, it had been concluded from Tapes 1 and 2 that the experience of the subject undergoing transformation should be eliminated; Tape 3 thus started from the point of him being already female.

Tape 3 (Figure 3), in addition to substantiating breasts as erotic, began to explore the erotic properties of the subject having a woman's buttocks, since "outrageously feminine sex organs" in Tape 1 had generated considerable erection, and it was unclear if the subject might identify buttocks as erotic, too. The description was:

Tape 3: "You're with a fellow, he's coming over to you there and he's starting to unbutton your shirt and you look down and you see that you've got tits. Firm, small, firm tits. He's gonna seduce you and he takes his hands and he's rubbing his hands over your tits, and he's saying 'You really have nice tits. They're really nice, I really

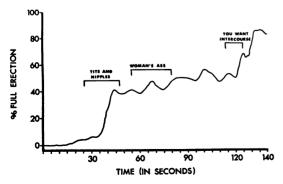


Fig. 3. Erection during Tape 3 of transformation.

like them.' He's rubbing, rubbing his hands over your nipples. You got big nipples. He's rubbing his hands over your tits there. He's feeling your breasts. You can feel him rubbing his hands over your breasts. It really feels good. Now he's unbuttoning your pants and you look down and you've got an ass. A woman's ass. He's taking his hands and he's rubbing you over your ass, taking his time. He wants to get you warmed up now. He's rubbing your ass, you can feel his hands on your ass. He's rubbing your smooth skin, he can really feel your ass. He's really getting turned on and so are you now. You're really getting turned on and he's playing with your tits getting excited. You really want to screw. You'd really like him to screw you. You're turned on by him, and you feel yourself and your ass. You're really excited by him. He's really turned you on. You feel him rubbing your ass and he wants to screw you really bad; you're really excited and hot, you feel how hot you are. You really want to have intercourse now. You're pulling him over to the bed; you really want to have intercourse. You're really excited."

Once again, reference to tits and nipples accelerated the subject's erection response (26 to 47 sec), but references to having a "woman's ass" (55 to 80 sec) failed to produce significant sexual arousal. References to his being sexually excited as a female and wanting intercourse, by contrast (114 to 125 sec), was correlated with marked arousal.

A final Tape 4 (Figure 4), attempted to eliminate prior nonerection-producing material and thus was devoid of references to a sadistic male and the entire transformation sequence. There was further reference to the patient's having a woman's buttocks to confirm that this content generated minimal sexual arousal.

Tape 4: "You're in a room with a fellow, he's walking over towards you because he's

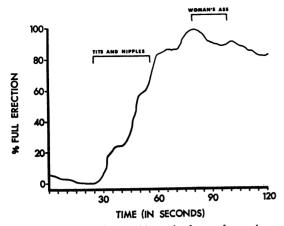


Fig. 4. Erection during Tape 4 of transformation.

seen that you have breasts. He's walking over towards you, and you're starting to undo your shirt. Now he's undoing your shirt and he's looking at your breasts. He's saving, 'You really have nice breasts. They're really very nice.' He's taking his hands and just looking at them, kind of touching your nipples, says, 'You've got great nipples. They really stick out. Very feminine, they look very feminine. As a matter of fact, you're so tall and have nice breasts.' Now he's looking at your waist. He says, 'You have a very nice waist, it kind of pulls in there. You kind of pull in your waist. It looks so nice. Really nice.' He says, 'Would you mind if I' . . . then he's just kind of slipping off your pants there. He's looking at your ass, he's saying 'Man you really have a nice ass, it's really very feminine.' And he just can't help himself. He has his hands on your ass, and he's rubbing your ass. He's whispering things in your ear. And now you're going to take him over to the bed and you're kind of pulling him over to the bed there. You want to take him over there and neck with him. You're very excited."

Descriptions of the subject's fantasy of "tits and nipples" were elaborated in greater length and detail (25 to 56 sec) than in prior tapes and produced the expected results, marked erection. We also repeated descriptions of the subject having a "woman's ass", although there was no room for increased erection response to occur from the already 100% full erection; decline in the subject's erection (79 to 98 sec) suggested again that buttocks were not as erotic as breasts.

This series of tape descriptions, although not the final product of our investigation of this particular subject's sexual arousal, demonstrates how some conclusions can be reached about his sexual arousal through the use of the audiotape penile-transducer method. Although the subject reported the sadistic nature of the "transformer" and the transformation itself as erotic to him, this was not substantiated by erection measures. Descriptions of the subject having female sex organs were erection-producing, and by controlling descriptions of breasts versus buttocks, breasts emerged as the stronger erotic cue.

The precise control of erotic cues to investigate hypotheses regarding sexual arousal. In Case A, the use of the audiotape procedure to develop and elicit arousal was illustrated in a subject for whom the usual visual cues (slides, movies) were impractical or impossible. A second difficulty with such global cues as movies is the inability of the therapist to determine what particular aspect of the entire movie serves as an erotic cue for the subject. For example, individuals with homosexual arousal patterns may be presented with pictures or movies of heterosexual intercourse. When erection responses occur the experimenter assumes such an individual has considerable heterosexual arousal. On questioning, however, the subject may reveal that he fantasied himself in the female's position in the movie and was attending to the male. Thus, apparent heterosexual erection responses were, in fact, homosexual in nature.

Ideally, one would like to be able to record the subject's thoughts during erection measures, but this is beyond our technology. An approximation is to narrow the stimulus input in order to isolate the precise cues that generate erections. We have begun to use audiotape descriptions in this fashion, as illustrated in Case B.

Case B

A 22-yr-old single caucasian male reported a 2-yr history of sexual arousal to women's white or brown open-toed sandals. Although he also reported fantasies of kissing and licking the girl's feet or smelling how "sexy" they were, he denied that women's feet by themselves produced sexual arousal. He reported it was the sandals that "turned him on", that feet without sandals were not erotic.

It was unclear from the history whether the subject's sexual arousal was to sandals or to the girls' feet. Although his verbal report was that he was not aroused by feet, his fantasies nonetheless incorporated references to foot contact, *i.e.*, holding, licking, and smelling feet. Specific audiotaped descriptions were subsequently developed to test whether sandals, feet, or elements of both were responsible for the subject's sexual arousal. The description involved cues referring mainly to sandals, *i.e.*,

Tape 1: "You are in a room, in a room with a girl, she's got some sandals on, you see her sandals there. She's very attractive, you see her sandals, the white kind. You see them on her feet there, see the strap between her toes. She's got very pretty feet. You are looking at the white sandals there. very pretty, see how they fit her feet, going in between her toes there, going in between her toes. See the leather there with the plastic in between her toes, very attractive, white, very attractive, white leather sandals, open toed, very attractive and white. See them on her, on her feet there, very attractive, and you see the shoes, sandals, white sandals, as you are walking over, and you're feeling the sandal, very white, you can feel it in your hands, the sandal, very white, holding it, you can feel, feel the material."

Although this description was primarily of sandal cues with minimal reference to the girl's foot, it generated only 20% of a full erection (Figure 5, Tape 1), contrary to expectation considering the subject's report. Prompted by this description of sandals failing to generate significant arousal, we speculated that references to the girl's foot might generate erections, and the following description was developed, replete with foot cues but with minimal references to sandals.

Tape 2: "You are in a room with a girl and you are looking over at her, looking over at her, and you see her feet. She's really got beautiful feet, she's got sandals on, but you are looking at her feet, really beautiful feet, soft skin, very soft skin, very attractive feet, and you are starting to move over there towards her. She's just kind of playing with her sandals there, they drop to the ground. You come over and she's very willing to let you play with her feet, to hold her feet, caress them. You have your hands on her feet now, you are licking her feet, you can smell her feet, you are licking her feet. She wants you to do that, she wants you to feel her feet there, get a hold of her foot in your hands, you are licking her foot, kissing it, it's very, very sexy smelling. Really sexy smelling. she really wants you to hold her foot there. You feel it, you feel the smooth skin, very smooth, smooth skin on her foot, very attractive. You're just kind of holding her foot there, kissing her foot, holding it and kissing it. She's really turned on. Holding her foot, she's really turned on by it. She's really turned on, holding her foot. You're really, really enjoying it. Feeling the skin on her foot, holding her foot, feeling the skin there, very smooth, very smooth skin."

By deleting most references to sandals, this second description of the girl's foot, its feel, smell, etc. generated 75% of a full erection.

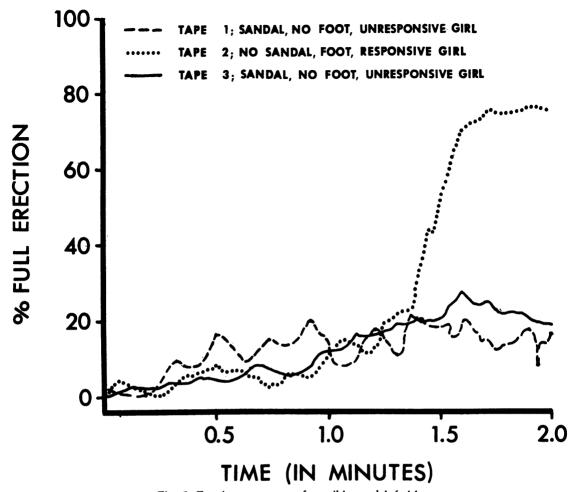


Fig. 5. Erection responses of possible sandal fetish.

Such a result strongly suggests that references to the girl's foot were erotic, not the sandals. To confirm this, a third tape description was developed, similar to Tape 1, focusing on sandals and excluding foot cues. This description (Tape 3, Figure 5) produced only 26% of a full erection, reaffirming that sandal cues generated limited erection responses.

Re-examination of tape descriptions 1, 2, and 3 revealed that Tape 2 differed from Tapes 1 and 3 not only in the parameters of sandal versus foot cues, but also involved numerous references to the girl becoming sexually aroused to her foot being held and caressed. We subsequently sought to determine how important the girl's responsiveness to her foot being caressed was to the subject's arousal. Since it was

apparent from the previous descriptions that foot cues were more responsible for sexual arousal than sandal cues, sandal cues were eliminated from further tapes and references to the girl's sexual arousal to her foot being felt were consecutively added, withdrawn, and then added to separate descriptions. Thus, the fourth tape involved minimal reference to sandals, considerable reference to the girl's foot, and to the girl becoming aroused as her foot is caressed.

Tape 4: "You are in a room with a girl, a very attractive girl. See her legs, you are looking down at her legs, looking down at her legs, down to her feet, she's letting her shoes fall off and you can see her foot, very attractive, smooth. You reach down,

you reach down, you just kind of catch her foot in your hand. She likes it. She's just kind of playing with you now. Just kind of playing with you. She's moving her foot around so you can reach for it. She's moving her foot around and she's just kind of playing with you. She's moving it around, around your penis now. You've got your hands around her foot. You can feel it, very smooth, and she's playing with you. You're trying to kiss her foot, she's kind of keeping it away from you now. Now you feel your lips on her foot, you're smelling her foot, you're smelling her foot, very smooth, the skin is very smooth, very smooth, and she's tugging it away a little from you, kind of teasing you. She really

likes it, she's really enjoying you holding her foot there, feeling her foot, she's really excited by it. She's breathing deep now, she's really getting excited. She's really getting turned on . . . you can see she's breathing fast there, she's breathing fast and getting excited. She's moving her foot right in your face there, just kind of pushing it right at you. She's really excited and turned on, breathing heavy, she's really excited. She's just losing control of her arousal."

This description (Figure 6, Tape 4) generated 76% of a full erection, confirming the results of Tape 2 that numerous references to the girl being responsive and aroused to her foot being held generated considerable sexual

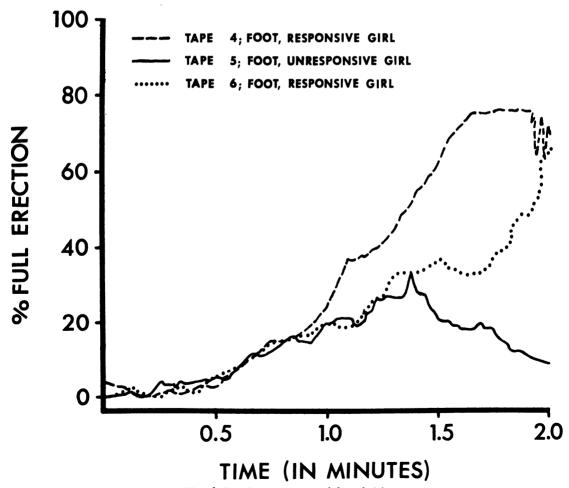


Fig. 6. Erection responses of foot fetish.

arousal. To explore further the elements of the subject's arousal, the next description was an attempt to hold foot cues constant while eliminating references to the responsiveness of the girl.

Tape 5: "You are with a girl, with a girl in a room, you're looking down at her legs. She has great legs, looking down at her foot, she's really got a nice, a nice foot. Very smooth, you are walking over close to her. She's really a nice looking blond. Walking over to her, you reach down and vou're feeling her foot, feeling her foot, very smooth, it's smooth and warm, you bring your mouth right down to her foot, kind of mouthing her foot, kissing her foot, feeling it there in your mouth. Feel how smooth her foot is, it really smells good, smells very sexy, really sexy. It smells terrific, it's smooth, very smooth, you can feel her foot there with your hands, really exciting. She really has nice, soft feet. Really sexy, smooth and sexy. She really has a nice foot there, you are feeling it, kissing her, and now you are licking her foot. You feel your tongue on her foot there, you feel your tongue, your tongue is right up against her foot there, rubbing your tongue around her foot, kissing her foot, rubbing her foot, very smooth, smelling sexy. She's really got a nice, a nice foot, very smooth, warm. You're really feeling it, it's really terrific."

This tape description (Figure 6, Tape 5) generated only 36% of a full erection in contrast to Tape 4, confirming that references to the girl's responsiveness were needed to produce significant erections. A final Tape 6 was developed, similar to Tape 4, involving foot cues, but including references to the responsiveness of the girl as her foot was being held and caressed. This description, like Tape 4, was successful in generating considerable arousal (66% of a full erection), confirming that adding these

cues of the girl's responsiveness to her foot being held added to the subject's sexual arousal.

This series of measurements serves to highlight another frequent finding when one controls for the actual stimulus presented during such measurement. Many subjects cannot identify exactly what specific cues are erotic to them. In many cases, as pointed out recently by Barlow, Leitenberg, and Agras (1969), there is frequently a marked difference between the subject's verbal report and objective measures of the subject's sexual arousal. Sexual aggressives during measurement sessions will frequently deny any subjective arousal to descriptions of aggressive cues when penile measures indicate 80 to 100% full erection to those very descriptions. Such findings seriously question conclusions about subject's sexual arousal based upon interview material.

Investigating arousal patterns that pose ethical and technical problems. The explicit sexual content of cues necessary to generate sexual arousal in some subjects and the sensitive nature of sexual objects or acts involved in some arousal patterns frequently make it difficult to develop videotape or pictorial erotic cues to assess deviates' sexual arousal. Sexual objects such as young girls and boys or primary relatives, dangerous sadistic acts, and rape behavior are examples of erotic cues whose acquisition for presentation would pose definite ethical issues. On the other hand, the development of an audio description of rape, for example, could incorporate a specific partner in an aggressive rape scene with relative ease. The following case demonstrates the use of audio descriptions for presentation of rape cues.

Case C

The subject was a 17-yr-old black male, referred from the courts following his admitted rape of a 13-yr-old and a 63-yr-old caucasian female. He reported thinking frequently of sexual cues from his first aggressive sexual experience at the age of 11, when he raped his 9-yr-old sister. At age 13 and 14, he was having

sexual intercourse with girls friends regularly, but also began window-peeping, which continued to age 17. Since age 14, he had thought about dating white girls on hearing they were more sexually excitable than black girls. Attempts at such dating, however, proved unsuccessful. At age 15, he began dating a black girl 2 yr his senior and by age 16, had fathered a son with her. Five months after his son's birth, the subject developed strong urges to rape girls, especially white girls. Six months after his son's birth, he began aggressively to demand sex from his girl friend, and if refused, would rape her.

He also reported sexual attraction to males since his early teens and enjoyed males fellating him or penetrating them during anal intercourse. On a few occasions, he had raped homosexuals if they refused him sexually.

A week and a half before his arrest, his urges to rape a white woman had increased both in intensity and frequency, culminating in his rape of an elderly white woman. The following day, he went to the home of a 13-yr-old white girl (a school mate), raped her, and then turned himself in to the police.

By history, the subject saw a clear relationship between aggression directed at his sexual partner and his own sexual arousal. The more he forced himself on his partner, the greater was his reported sexual arousal and enjoyment. He also appeared indiscriminate in the partner chosen to rape; that is, when his urges to rape were high, he would rape his sister, his girl friend, males and females, irrespective of age or race.

To evaluate the aggressive component of his sexual arousal, and to investigate the lack of discrimination he described regarding who he raped, a series of audiotaped descriptions was developed. The first involved the patient performing anal intercourse with another male without reference to his forcing himself on the male. The actual description was as follows:

Tape 1: "You're with a guy, with a guy in bed. You really want to screw him.

Coming up from behind on him, he's got his clothes off, his ass is up in the air. You feel your penis, you feel your penis. You're starting to penetrate him; you're starting to push your penis into him. You feel your penis slipping in, now you're starting to move in and out of him. You can feel his body right there, you have your arms around his ass. You're holding him close there and you're moving in and out of him. You feel your penis deep in him, deep in his rectum there; you can feel your penis. You see yourself right there, you're moving with him, moving in and out now. really starting to get moving now. You're really starting to enjoy it. You're moving with him in and out. You can feel your penis, really stiff and hard, really stiff and hard. You're moving in and out of his rectum. You feel him right there, you've got your arms around him. You're holding him there, you feel your penis right in him, really deep in him. You're moving in and out, you're moving in and out now, you feel yourself starting to get really excited and starting to come. You're moving in and out of him there, you're holding onto him. He's kind of moving with you now, and now you're really starting to feel your ejaculation coming. You're moving faster and faster, you're really screwing him now. You feel yourself moving in and out. You're starting to screw him now, holding him real tight there, you're ejaculating into him, holding him real tight there, you're ejaculating into him, just letting go as you ejaculate into him. It really feels good. You're really relaxed."

The patient's erection response to this description (Figure 7) was minimal, 7% of a full erection. To then determine what component rape might play in the subject's arousal to males, a second description was developed of anal intercourse with the same male but against the partner's will:

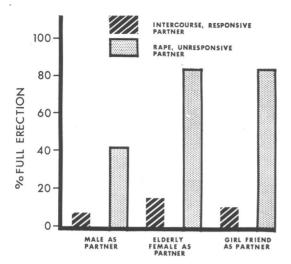


Fig. 7. The interrelationship of aggressive cues and sexual arousal.

Tape 2: "You're with a guy in a room, with a guy in a room and you're coming over to him. You're asking him how about some sex? How about if you screwed him and he's saying no, he's not interested. You reach over and you say, 'Well, you're gonna be interested', and you kind of reach over and unbutton his pants and you pull his pants down, and he's trying to stop you from pulling his pants down. He's trying to stop you from pulling his pants down; you just pull 'em on down and you wheel him over and you move him over to the bed; and he's kind of fighting you now, he's fighting you trying to get away. You just turn him over on his stomach; he's lying there on his stomach. You reach down, you feel his penis there, you've got a nice stiff erection; a nice stiff erection and now you pull his ass up to you. You can see his rectum there, and you're starting to stick your penis into him. He's fighting you a little, you're holding on to him tight, he's fighting you there, you're holding on to him and you're pushing your penis, you just shove your penis right on into him. You just feel your penis tight, tight into his rectum. It's really tight and you're shoving it into him, and he's start-

ing to squirm there trying to get away, and you're pushing on him, you're just shoving on him and pushing your penis right into him and now you're getting it all the way in; really deep, all the way in. You're pushing it in now, you're holding him down. He's fighting you, he's trying to get away, but you really want to screw him. You really want to screw him. You're holding him down there and you're just screwing him. You feel yourself screwing him. You've got your penis right in him, you're shoving it into him, just screwing him there and he's fighting, trying to get away; but it's no use, you're too powerful for him. You're just screwing him now, you feel your penis right there and you're ejaculating into him, just ejaculating."

As seen in Figure 7, inclusion of aggressive references generated 41% of a full erection as compared to the 7% generated by anal intercourse with the same male without references to rape.

To determine if this finding could be substantiated with different sexual objects or partners, a third description was developed of the subject having sexual intercourse with the elderly white female he had actually raped. This description made no references to raping her, but described intercourse with both of them mutually enjoying the experience. The subject's erection to this particular content was about 15% of a full erection (Figure 7). A fourth description of sexual intercourse with the identical woman, but with numerous references to his raping her was developed next. The addition of these aggressive elements produced marked increase in the subject's sexual arousal with his developing 83% of a full erection to a description of raping the elderly woman, as compared to the previous 15% (Figure 7). Similar results were obtained to descriptions of sexual intercourse with his girl friend with and without components of rape. Without reference to rape cues (Figure 7), the subject generated approximately 12% of a full erection. With the addition of rape content to that description, holding the object constant (the subject's girl friend), 83% of a full erection was generated.

These data confirmed in the laboratory two elements of this subject's reported history. First, adding rape components while describing his sexual interactions generated considerable increase in his sexual responsiveness as measured by the penile transducer, confirming his report that aggression directed at his partner heightened his sexual arousal. Secondly, this same trend was demonstrated across rape victims; that is, in the laboratory the patient indiscriminately responded to descriptions of rape involving males, an elderly female, and his girl friend, similar to his reported sexual arousal outside of the laboratory situation. These findings suggest that in this particular subject, cues referring to rape-generated erections, irrespective of the partner or object involved, i.e., the act of rape, generated sexual arousal, not the characteristics of the victim.

Reliability of audio descriptions. If a subject's erections to audio descriptions are used as a dependent measure during treatment, it is important to know the reliability of such repeated measures. A partial answer appears in Figure 8, where Patient A was presented an audiotape

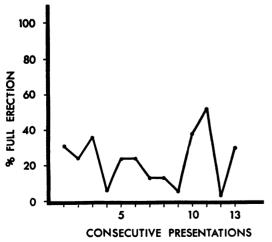


Fig. 8. Erection to repeated presentations of a transformation description.

similar to his Tape 1 described above. For 13 successive presentations over a 27-day period, his mean erection to this description was 23% with a standard deviation of 14.

Similar data are available for six other subjects who were presented single tape descriptions of a content similar to their diagnostic classification. Twelve successive measures occurred over a three- to four-week period for each subject. Results appear in Table 1.

Since there is some degree of variability in repeated measures, we prefer to use two or three audio descriptions, averaging the results for each measurement session to improve the stability of repeated measures.

DISCUSSION

The audiotape procedure appears to have advantages over the two most popular methods of assessing sexual arousal patterns, verbal report and objective penile measurement during the presentation of visual cues such as movies. This procedure overcomes the major disadvantage of verbal report, *i.e.*, the possible distortion through repression, lack of discrimination, or denial by the subject as reflected in Cases A and B, by measuring sexual arousal objectively. At the same time, the audiotape procedure capitalizes on the major strength of verbal report because it, like verbal report, can utilize the breadth and flexibility of verbal description

Table 1 Erections to repeated presentation of audio descriptions.

Diagnosis	Tape Number	Mean Erection	Standard Deviation
Homosexual	1 2	13 22	8 16
Homosexual	1 2	60 60	6 11
Sadist	1	30	18
Incest	1	49	25
Transsexual	1	45	24
Homosexual	1	15	20

of cues that can encompass both external and internal (fantasies) stimuli.

The audiotape procedure, while sharing the advantage of objective measurement of sexual arousal with procedures involving presentation of complex, global stimuli such as movies, overcomes the major disadvantage of such standard cues, the lack of flexibility of the cues in a standard presentation. Thus, with the audiotape procedure, it is possible to present cues to which legal or ethical objections would be raised in making a motion picture (such as in Case C). It is also possible to exert very precise control of the cues presented to the subject (as in Cases A and B), which would be difficult and prohibitively expensive using movie stimuli. Finally, it is possible, with the audiotape procedure, to present stimuli that are not readily translatable to a visual mode, such as the feeling states of the partner (as in Case A).

We believe the audiotape procedure combines the objectivity of erection measurement with the flexibility and richness of verbally represented cues and enables the investigator to deal with fantasy material, which is such an important part of sexual arousal (Abel and Blanchard, 1974).

Cautions

Despite the advantages enumerated above, investigators should be aware of potential problems of interpretation. The major problem arises from the ability of some subjects to suppress erection responses voluntarily (Abel et al., in press; Henson and Rubin, 1971; Laws and Rubin, 1969). Thus, one must be cautious about interpreting the meaning of direct penile measurement, regardless of the stimulus used, since an apparent lack of responsiveness may be due to either the lack of erotic value of the stimulus for the subject or the voluntary suppression of erection.

Our experience with the audiotape procedure suggests several ways to circumvent the problems caused by voluntary suppression. First, one should rely much more heavily on data that confirm that certain cues do generate erections and less heavily on data showing an absence of erections to certain cues. It has been shown that subjects' ability to generate erections voluntarily is much poorer than their ability to suppress erections (Henson and Rubin, 1971; Laws and Rubin, 1969). Therefore, when erections are obtained, one can be reasonably confident that the cues presented were responsible for generating the erection.

Second, to circumvent the problem of voluntary suppression of erection, one should rely heavily on appropriate experimental design to determine the reliability of erotic cues. Examples of the introduction, withdrawal, and re-introduction of these cues in an A-B-A design are evident in Case B and in prior studies (Abel, Blanchard, and Mavissakalian, 1974). These designs from the experimental analysis of behavior (Barlow and Herson, 1973) are particularly well suited to identifying idiosyncratic erotic cues.

Finally, our previous research (Abel et al., in press) has shown that audiotape presentations are less susceptible to voluntary suppression effects, at least in a homosexual population, than stimuli presented in visual modes. Measuring sexual arousal with audio descriptions may thus help to circumvent the effects of subject suppression of erection responses.

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